Author index

Aldaz, A. 101, 285
Aotsuka, K. 257

Baars, A. 115, 293
Baba, N. 333
Battistuzzi, R. 227
Baucke, F.G.K. 67
Bergveld, P. 193
Bobacka, J. 23, 33
Bomer, J.G. 193
Borkowska, Z. 265, 275
Borsari, M. 227
Britz, D. 143

Cases, F. 285
Cha, C.S. 47
Cheek, G.T. 133
Cobben, P.L.H.M. 193
Colombini, M.P. 149
Costa, G. 227
Cross, S.J. 221
Crouch-Baker, S. 55

Dallari, D. 227

Egberink, R.J.M. 193

Fawcett, W.R. 265, 275
Fedurco, M. 265, 275
Feldberg, S.W. 109
Feliu, J.M. 101
Fujimoto, M. 315
Fuoco, R. 149
Fushimi, K. 257

Gao, Z. 33
Gavioli, G. 227
Genborg, Å. 241
Gökağaç, G. 235
Green, T.A. 121
Guarr, T.F. 221
Guaus, E. 307

Han, J. 43
Hanzlík, J. 149
Harris, C.S. 319
Heinze, J. 183
Herrero, E. 101
Hourani, M. 139

Ivaska, A. 23, 33

Kakuno, K. 315
Kant, R. 1
Katz, E. 87, 165
Kennedy, B.J. 235
Kennedy, R.T. 329
Kitamura, F. 281
Knapen, J.W.J. 293
Kováčová, Z. 265, 275

Lakshmanan, A.S. 95
Lewenstam, A. 23, 33
Li, C.M. 47
Li, H. 221
Liu, P.F. 47
Liu, Y. 209
Lopez, C. 155
Luo, W. 109

Maeder, G. 329
Masuda, H. 333
Matencio, T. 183
McKubre, M.C.H. 55
Meerholz, K. 183
Mizuno, T. 333
Morallón, E. 285
Muñoz, E. 285
Murali, K.R. 95

Nagaoka, T. 315
Nakao, H. 315

O'Grady, W.E. 133
Ogura, K. 315
Ohmori, T. 333
Ohsaka, T. 281
Olbrich-Stock, M. 173
Olsthoorn, A.J.J. 165

Østerby, O. 143

Passell, T.O. 55
Pérez, J.M. 285
Posdorfer, J. 173
Pospíšil, L. 149
Pu, C. 43
Pyo, M. 329

Quickenden, T.I. 121

Ramaraj, R. 77
Rangarajan, N. 95
Rangarajan, S.K. 1, 95
Reinhoudt, D.N. 193
Reynolds, J.R. 329
Rocha-Filho, R.C. 55
Rudolph, M. 109
Ryan, M.D. 209

Santucci, J. 55
Sanz, F. 307
Schindler, R.N. 173
Schlereth, D.D. 165
Schmidt, H.-L. 87, 165
Seo, M. 257
Sharp, M. 241
Sluyters, J.H. 115, 293, 307
Sluyters-Rehbach, M. 115, 293, 307
Smedley, S.I. 55
Su, Y.O. 323
Subramanian, V. 95

Takahashi, H. 257
Tanzella, F.L. 55
Tavagnacco, C. 227
Tokuda, K. 281

Vázquez, J.L. 285
Vengatajalabathy Gobi, K. 77
Vieil, E. 155, 183
Vorotyntsev, M.A. 155

Wang, C.-B. 251

Xu, F. 221

Yang, H.X. 47
Yano, J. 315
Yu, C.-H. 323

Zen, J.-M. 251
Zhou, W.-F. 43

Subject index

Adsorption
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285
The adsorption of thiourea at the mercury electrode from 1 M KF and 1 M KCl solutions and their mixtures: a dropping mercury microelectrode study (Baars et al.) 293
ATP
Controlled release of biological molecules from conducting polymer modified electrodes. The potential dependent release of adenosine 5′-triphosphate from poly(pyrrole adenosine 5′-triphosphate) films (Pyo et al.) 329

Bi–Ru pyrochlore
Oxidative stability of bismuth–ruthenium pyrochlore $Bi_2Ru_2O_{7-y}$ (Gökağaç, Kennedy) 235
Brush plating
Brush plated CdSe films and their photoelectrochemical characteristics (Murali et al.) 95

Carbonate medium
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285
C1 compounds
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285
C2 compounds
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285
Cd(II)KBr(1 M)/Hg
Study of reactant adsorption in the system Cd(II)KBr(1 M)/Hg by chronocoulometry (Guaus et al.) 307
CdSe films
Brush plated CdSe films and their photoelectrochemical characteristics (Murali et al.) 95
Chemically modified electrode
Determination of dissolved oxygen by catalytic reduction on a Nafion®/ruthenium-oxide pyrochlore chemically modified electrode (Zen, Wang) 251
Chronocoulometry
Study of reactant adsorption in the system Cd(II)KBr(1 M)/Hg by chronocoulometry (Guaus et al.) 307
Clay coated electrodes
Photoinduced electron transfer reactions of $[Ru(bpy)_3]^{2+}$ adsorbed onto Nafion® and clay coated electrodes in the presence of Fe^{3+} ions (Vengatajalabathy Gobi, Ramaraj) 77
CO
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285

Cold fusion
Electrolytic preparation of highly loaded deuterides of palladium (Green, Quickenden) 121
Colloids
Dropping mercury microelectrode for studying reducible colloids and suspensions (Baars et al.) 115
Complexation
Effect of complexation by cyclodextrins on the voltammetric characteristic of viologens adsorbed on an HMDE (Kitamura et al.) 281
Conducting polymers
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33
Controlled release of biological molecules from conducting polymer modified electrodes. The potential dependent release of adenosine 5′-triphosphate from poly(pyrrole adenosine 5′-triphosphate) films (Pyo et al.) 329
Cyclic voltammetry
Ensuring self-consistent assignment of thermodynamic parameters in simulations of electrochemical–chemical systems (Luo et al.) 109
Cyclodextrins
Electrochemical and spectral evidence of the inclusion of the herbicide difenzoquat by cyclodextrins in aqueous solution (Pospíšil et al.) 149
Effect of complexation by cyclodextrins on the voltammetric characteristic of viologens adsorbed on an HMDE (Kitamura et al.) 281
Cystamine
Reconstitution of the quinoprotein glucose dehydrogenase from its apoenzyme on a gold electrode surface modified with a monolayer of pyrroloquinoline quinone (Katz et al.) 165
Cysteic acid
Oxidation of cysteine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 265
Cysteine
Oxidation of cysteine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 265
Cysteinesulfinic acid
Oxidation of cysteine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 265

Desulfurization
Desulfurization of thiophene by electrochemical perturbation (Hourani) 139
Difenzoquat
Electrochemical and spectral evidence of the inclusion of the herbicide difenzoquat by cyclodextrins in aqueous solution (Pospíšil et al.) 149
Differential-potentiometric cell
Differential-potentiometric cell for the restandardization of pH reference materials (Baucke) 67

Diffusion layer imaging
UV–visible spectroscopic studies in the diffusion layer during electropolymerization of thiophene (Olbrich-Stock et al.) 173
Diffusion-limited charge transfer
Effect of surface roughness on diffusion-limited charge transfer (Kant, Rangarajan) 1
Digital simulation
Some numerical investigations of the stability of electrochemical digital simulation, particularly as affected by first-order homogeneous reactions (Britz, Østerby) 143
4,6-Dimethyl-1-phenyl-2-thiopyrimidine
Electrochemistry of 4,6-dimethyl-2-thiopyrimidine and 4,6-dimethyl-1-phenyl-2-thiopyrimidine in dimethylformamide (Battistuzzi et al.) 227
4,6-Dimethyl-2-thiopyrimidine
Electrochemistry of 4,6-dimethyl-2-thiopyrimidine and 4,6-dimethyl-1-phenyl-2-thiopyrimidine in dimethylformamide (Battistuzzi et al.) 227
Dissolved oxygen
Determination of dissolved oxygen by catalytic reduction on a Nafion®/ruthenium-oxide pyrochlore chemically modified electrode (Zen, Wang) 251
D/Pd system
Isothermal flow calorimetric investigations of the D/Pd and H/Pd systems (McKubre et al.) 55
Dropping mercury microelectrode
Dropping mercury microelectrode for studying reducible colloids and suspensions (Baars et al.) 115

Electroanalysis
Powder microelectrodes (Cha et al.) 47
Electrocatalysis
Oxidative stability of bismuth–ruthenium pyrochlore $Bi_2Ru_2O_{7-y}$ (Gökağaç, Kennedy) 235
Electrochemical–chemical systems
Ensuring self-consistent assignment of thermodynamic parameters in simulations of electrochemical–chemical systems (Luo et al.) 109
Electrochemical chromatography
Electrochemical chromatography using a polyaniline stationary phase. II: Effects of pH of the mobile phase and column length (Nagaoka et al.) 315
Electrochemical kinetics
Powder microelectrodes (Cha et al.) 47
Electrochemical perturbation
Desulfurization of thiophene by electrochemical perturbation (Hourani) 139
Electrochemistry
Some numerical investigations of the stability of electrochemical digital simulation, particularly as affected by first-order homogeneous reactions (Britz, Østerby) 143
Electroluminescence
Electroluminescence from p-type silicon during anodic oxidation in ethylene glycol solution (Seo et al.) 257
Electrolytic loading
Electrolytic preparation of highly loaded deuterides of palladium (Green, Quickenden) 121
Electropolymerization
UV–visible spectroscopic studies in the diffusion layer during electropolymerization of thiophene (Olbrich-Stock et al.) 173
Ethylene glycol
Electroluminescence from p-type silicon during anodic oxidation in ethylene glycol solution (Seo et al.) 257

Fast ion supply
Controlled release of biological molecules from conducting polymer modified electrodes. The potential dependent release of adenosine 5′-triphosphate from poly(pyrrole adenosine 5′-triphosphate) films (Pyo et al.) 329
Field effect transistors
Chemically modified field effect transistors: the effect of ion-pair association on the membrane potentials (Cobben et al.) 193
First-order homogeneous reactions
Some numerical investigations of the stability of electrochemical digital simulation, particularly as affected by first-order homogeneous reactions (Britz, Østerby) 143
Formic acid
Poison formation reaction from formic acid on Pt(100) electrodes modified by irreversibly adsorbed bismuth and antimony (Herrero et al.) 101
Four-electron transfer mediator
Gold electrode modification with a monolayer of 1,4,5,8-naphthalenetetrone as a four-electron transfer mediator: electrochemical reduction of dioxygen to water (Katz, Schmidt) 87

Glucose dehydrogenase
Reconstitution of the quinoprotein glucose dehydrogenase from its apoenzyme on a gold electrode surface modified with a monolayer of pyrroloquinoline quinone (Katz et al.) 165
GOD
Fabrication of Pt microporous electrodes from anodic porous alumina and immobilization of GOD into their micropores (Masuda et al.) 333
Gold
Oxidation of cysteine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 265
Gold electrode
Reconstitution of the quinoprotein glucose dehydrogenase from its apoenzyme on a gold electrode surface modified with a monolayer of pyrroloquinoline quinone (Katz et al.) 165
Gold electrode modification
Gold electrode modification with a monolayer of 1,4,5,8-naphthalenetetrone as a four-electron transfer mediator: electrochemical reduction of dioxygen to water (Katz, Schmidt) 87

H/D uptake
Measurement of H/D uptake characteristics at palladium using a quartz crystal microbalance (Cheek, O'Grady) 133
HMDE
Effect of complexation by cyclodextrins on the voltammetric characteristic of viologens adsorbed on an HMDE (Kitamura et al.) 281
H/Pd system
Isothermal flow calorimetric investigations of the D/Pd and H/Pd systems (McKubre et al.) 55
Hydrogen storage
Measurement of H/D uptake characteristics at palladium using a quartz crystal microbalance (Cheek, O'Grady) 133

Intermolecular interactions
Adsorption study of cysteine, *N*-acetylcysteamine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 275
Ionic sensitivity
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 1. Theory (Lewenstam et al.) 23

Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33

Ion-pair association
Chemically modified field effect transistors: the effect of ion-pair association on the membrane potentials (Cobben et al.) 193

Iron porphyrin nitrosyls
The electrochemical reduction of iron porphyrin nitrosyls in the presence of weak acids (Liu, Ryan) 209

IR spectroscopy
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285

Isothermal calorimetry
Isothermal flow calorimetric investigations of the D/Pd and H/Pd systems (McKubre et al.) 55

Lead(II) film
Determination of the phase composition of anodic lead(II) film formed in sulfuric acid solution (Han et al.) 43

Manganese porphyrins
Electrocatalytic reduction of nitric oxide by water-soluble manganese porphyrins (Yu, Su) 323

Mathematical model
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 1. Theory (Lewenstam et al.) 23

Membrane potentials
Chemically modified field effect transistors: the effect of ion-pair association on the membrane potentials (Cobben et al.) 193

Mercury electrode
The adsorption of thiourea at the mercury electrode from 1 M KF and 1 M KCl solutions and their mixtures: a dropping mercury microelectrode study (Baars et al.) 293

Nafion®
Thermodynamic studies of redox reactions in poly(styrenesulphonate) and Nafion® films (Genborg, Sharp) 241

Nafion® coated electrodes
Photoinduced electron transfer reactions of $[Ru(bpy)_3]^{2+}$ adsorbed onto Nafion® and clay coated electrodes in the presence of Fe^{3+} ions (Vengatajalabathy Gobi, Ramaraj) 77

Nafion® ®
Determination of dissolved oxygen by catalytic reduction on a Nafion®/ruthenium-oxide pyrochlore chemically modified electrode (Zen, Wang) 251

1,4,5,8-Naphthalenetetrone
Gold electrode modification with a monolayer of 1,4,5,8-naphthalenetetrone as a four-electron transfer mediator: electrochemical reduction of dioxygen to water (Katz, Schmidt) 87

Nitric oxide
Electrocatalytic reduction of nitric oxide by water-soluble manganese porphyrins (Yu, Su) 323

Numerical experiments
Some numerical investigations of the stability of electrochemical digital simulation, particularly as affected by first-order homogeneous reactions (Britz, Østerby) 143

Optical beam deflection
On the interpretation of optical beam deflection data at excess of a background electrolyte (Vorotyntsev et al.) 155

Optical beam deflection study
Mass transfer and convolution. Part II. In situ optical beam deflection study of ionic exchanges between polyphenylene films and a 1:1 electrolyte (Vieil et al.) 183

Organosulphur compounds
Adsorption study of cysteine, *N*-acetylcysteamine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 275

Oxidative stability
Oxidative stability of bismuth–ruthenium pyrochlore $Bi_2Ru_2O_{7-y}$ (Gökağaç, Kennedy) 235

Palladium
Measurement of H/D uptake characteristics at palladium using a quartz crystal microbalance (Cheek, O'Grady) 133

Palladium deuterides
Electrolytic preparation of highly loaded deuterides of palladium (Green, Quickenden) 121

Phase composition
Determination of the phase composition of anodic lead(II) film formed in sulfuric acid solution (Han et al.) 43

Photoinduced electron transfer
Photoinduced electron transfer reactions of $[Ru(bpy)_3]^{2+}$ adsorbed onto Nafion® and clay coated electrodes in the presence of Fe^{3+} ions (Vengatajalabathy Gobi, Ramaraj) 77

Platinum electrodes
Formation of CO during adsorption on platinum electrodes of methanol, formaldehyde, ethanol and acetaldehyde in carbonate medium (Pérez et al.) 285

Poison formation reaction
Poison formation reaction from formic acid on Pt(100) electrodes modified by irreversibly adsorbed bismuth and antimony (Herrero et al.) 101

Poly(alkyleneoxy)acrylate
A plasticized poly(alkyleneoxy)acrylate-based polymer electrolyte with high ionic conductivity (Harris) 319

Polyaniline stationary phase
Electrochemical chromatography using a polyaniline stationary phase. II: Effects of pH of the mobile phase and column length (Nagaoka et al.) 315

Polycrystalline gold
Adsorption study of cysteine, *N*-acetylcysteamine, cysteinesulfinic acid and cysteic acid on a polycrystalline gold electrode (Fawcett et al.) 275

Polymer electrolyte
A plasticized poly(alkyleneoxy)acrylate-based polymer electrolyte with high ionic conductivity (Harris) 319

Poly(metallophthalocyanine) electrodes
Electrocatalytic oxidation of NADH at poly(metallophthalocyanine)- modified electrodes (Xu et al.) 221

Polyphenylene
Mass transfer and convolution. Part II. In situ optical beam deflection study of ionic exchanges between polyphenylene films and a 1:1 electrolyte (Vieil et al.) 183

Polypyrrole
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33

Poly(styrenesulphonate)
Thermodynamic studies of redox reactions in poly(styrenesulphonate) and Nafion® films (Genborg, Sharp) 241

Porous alumina
Fabrication of Pt microporous electrodes from anodic porous alumina and immobilization of GOD into their micropores (Masuda et al.) 333

Potentiometry
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33

Powder microelectrodes
Powder microelectrodes (Cha et al.) 47
PP-ATP
Controlled release of biological molecules from conducting polymer modified electrodes. The potential dependent release of adenosine 5′-triphosphate from poly(pyrrole adenosine 5′-triphosphate) films (Pyo et al.) 329

Quartz crystal microbalance
Measurement of H/D uptake characteristics at palladium using a quartz crystal microbalance (Cheek, O'Grady) 133

Reactant adsorption
Study of reactant adsorption in the system Cd(II)KBr(1 M)/Hg by chronocoulometry (Guaus et al.) 307
Redox reactions
Thermodynamic studies of redox reactions in poly(styrenesulphonate) and Nafion® films (Genborg, Sharp) 241
Redox sensitivity
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 1. Theory (Lewenstam et al.) 23
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33
Restandardization
Differential-potentiometric cell for the restandardization of pH reference materials (Baucke) 67

Self-consistency
Ensuring self-consistent assignment of thermodynamic parameters in simulations of electrochemical–chemical systems (Luo et al.) 109
Simulations
Ensuring self-consistent assignment of thermodynamic parameters in simulations of electrochemical–chemical systems (Luo et al.) 109
Stability
Some numerical investigations of the stability of electrochemical digital simulation, particularly as affected by first-order homogeneous reactions (Britz, Østerby) 143
Surface roughness
Effect of surface roughness on diffusion-limited charge transfer (Kant, Rangarajan) 1

Suspensions
Dropping mercury microelectrode for studying reducible colloids and suspensions (Baars et al.) 115

Thermodynamic parameters
Ensuring self-consistent assignment of thermodynamic parameters in simulations of electrochemical–chemical systems (Luo et al.) 109
Thermodynamic properties
Thermodynamic studies of redox reactions in poly(styrenesulphonate) and Nafion® films (Genborg, Sharp) 241
Thin polymer films
Thermodynamic studies of redox reactions in poly(styrenesulphonate) and Nafion® films (Genborg, Sharp) 241
Thiophene
Desulfurization of thiophene by electrochemical perturbation (Hourani) 139
UV–visible spectroscopic studies in the diffusion layer during electropolymerization of thiophene (Olbrich-Stock et al.) 173
Thiourea
The adsorption of thiourea at the mercury electrode from 1 M KF and 1 M KCl solutions and their mixtures: a dropping mercury microelectrode study (Baars et al.) 293
p-Type
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 2. Experimental study of polypyrrole (Bobacka et al.) 33
p-Type conducting polymers
Mechanism of ionic and redox sensitivity of p-type conducting polymers. Part 1. Theory (Lewenstam et al.) 23

UV–visible spectroscopy
UV–visible spectroscopic studies in the diffusion layer during electropolymerization of thiophene (Olbrich-Stock et al.) 173

Viologens
Effect of complexation by cyclodextrins on the voltammetric characteristic of viologens adsorbed on an HMDE (Kitamura et al.) 281
Voltammetric characteristic
Effect of complexation by cyclodextrins on the voltammetric characteristic of viologens adsorbed on an HMDE (Kitamura et al.) 281